

The invention claimed is:

1. A protective structure comprising:
  - (a) a mesh structure having an outer surface and an inner surface, wherein the inner surface defines an annular space;
  - (b) a concrete fill material which resides within the annular space of the mesh structure and within the mesh structure;
  - (c) at least one reinforcement member which resides within the concrete fill material;and
  - (d) a concrete face material which resides upon the outer surface of the mesh structure.
2. The protective structure of Claim 1, in which the mesh structure comprises a plurality of interconnected steel wires.
3. The protective structure of Claim 2, in which the steel wires are selected from the group consisting of 8 gage, 10 gage, 12 gage, or 16 gage steel wires.
4. The protective structure of Claim 2, in which the mesh structure comprises a plurality of mesh unit cells having a width in the range of about 0.75 to 1.75 inches and a length in the range of about 0.75 to 1.75 inches.
5. The protective structure of Claim 1, in which the concrete fill material permeates through the mesh structure to form the concrete face material.

6. The protective structure of Claim 1, in which the reinforcement member is a steel reinforcement bar.
7. The protective structure of Claim 1, in which the structure contains a plurality of reinforcement members located within the concrete fill material.
8. The protective structure of Claim 1, in which the structure deflects in response to a blast load.
9. The protective structure of Claim 8, in which the deflection in response to the blast load is 25% or less of the length of the structure.
10. The protective structure of Claim 1, in which the structure is a wall.
11. A protective system comprising:
  - (I) a plurality of adjacent protective structures, wherein each protective structure has a first end and a second end, and each protective structure comprises:
    - (a) a mesh structure having an outer surface and an inner surface, wherein the inner surface defines an annular space,
    - (b) a concrete fill material which resides within the annular space of the mesh structure and within the mesh structure,

(c) at least one reinforcement member which resides within the concrete fill material, and

(d) a concrete face material which resides upon the outer surface of the mesh structure; and

(II) a plurality of support members, wherein the support members receive the first or second ends of the protective structures to provide interlocking engagement of the protective structures to the support members.

12. The protective system of Claim 11, in which the mesh structure comprises a plurality of interconnected steel wires.

13. The protective system of Claim 12, in which the steel wires are selected from the group consisting of 8 gage, 10 gage, 12 gage, or 16 gage steel wires.

14. The protective system of Claim 12, in which the mesh structure comprises a plurality of mesh unit cells having a width in the range of about 0.75 to 1.75 inches and a length in the range of about 0.75 to 1.75 inches.

15. The protective system of Claim 11, in which the concrete fill material permeates through the mesh structure to form the concrete face material.

16. The protective system of Claim 11, in which the reinforcement member is a steel reinforcement bar.

17. The protective system of Claim 11, in which the structure contains a plurality of reinforcement members located within the concrete fill material.
18. The protective system of Claim 11, in which the structure deflects in response to a blast load.
19. The protective system of Claim 18, in which the deflection in response to the blast load is 25% or less of the length of the structure.
20. The protective system of Claim 11, in which the structure is a wall.
21. The protective system of Claim 11, in which the support members comprise a mesh structure.
22. The protective system of Claim 21, in which the mesh structure of the support members comprises a plurality of interconnected steel wires.
23. The protective system of Claim 22, in which the steel wires of the mesh structure of the support members are selected from the group consisting of 8 gage, 10 gage, 12 gage, or 16 gage steel wires.

24. The protective system of Claim 22, in which the mesh structure of the support members comprises a plurality of mesh unit cells having a width in the range of about 0.75 to 1.75 inches and a length in the range of about 0.75 to 1.75 inches.
25. The protective system of Claim 22, in which the mesh structure of the support members surrounds a concrete fill material such as reinforced concrete.
26. The protective system of Claim 25, in which the concrete fill material permeates through the mesh structure of the support members to form a concrete face material for the support members.